

Claims

[c1] 1. A compound miter guide comprising:

- a base plate, said base plate including a top, bottom, cutting side, protractor inscribed on said top, a curved slot in said base plate along said protractor, and a midpoint of said protractor;
- a fence pivotally attached to said bottom of said base plate at said midpoint;
- a base plate fastener; said base plate fastener used to movably connect said fence to said base plate along said curved slot, said fastener including a tightening end to secure said fence along said base plate;
- a blade guide pivotally attached to said base plate at said cutting side of said base plate using a pivotal connection, said blade guide including a top, open bottom, two sides, two open ends, a blade slot between said sides, open bottom and said open ends;
- at least one side rail having a top and bottom and being attached between said base plate and said blade guide, said bottom of said at least one side rail attached to said base plate, and said top of said at least one side rail attached to said blade guide such that said blade guide is movable along said at least one side rail

at least one protractor inscribed between said top and said bottom on one of said at least one side rail.

- [c2] 2.The compound miter guide of claim 1, wherein said top of said at least one side rail is attached above said blade slot at said top of said blade guide.
- [c3] 3.The compound miter guide of claim 2, further including at least one fastener; wherein said at least one side rail includes a protractor slot; wherein said at least one fastener is used to movably connect said top of said blade guide to said protractor slot of said at least one side rail; and wherein said fastener includes a tightening end to secure said blade guide along said protractor slot of said at least one side rail.
- [c4] 4.The compound miter guide of claim 1, wherein there are two side rails and said ends of said blade guide are between said two side rails.
- [c5] 5.The compound miter guide of claim 4, wherein said top of said side rails are attached above said blade guide at said top of said blade guide.
- [c6] 6.The compound miter guide of claim 5, further including at least one fastener; wherein said side rails include a protractor slot; wherein at least one of said two side rails includes a protractor inscribed; wherein said at least one

fastener is used to movably connect said top of said blade guide between said protractor slots of said two side rails; and wherein said fastener includes a tightening end to secure said blade guide along said protractor slots of said two side rails.

- [c7] 7. The compound miter guide of claim 3, wherein said top of said blade guide includes a channel to receive a bolt as said fastener.
- [c8] 8. The compound miter guide of claim 6, wherein said top of said blade guide includes a channel to receive a bolt as said fastener.
- [c9] 9. The compound miter guide of claim 1, further including a curved groove on said bottom of said base plate; further including a fence stud extending up from a top of said fence; and wherein said fence stud is positioned to engage said curved groove.
- [c10] 10. The compound miter guide of claim 1, wherein said blade slot is enlarged at an upper portion to receive a miter saw with a thicker top.
- [c11] 11. The compound miter guide of claim 1, wherein said blade guide includes a removable center section having a thinner blade slot for guiding thinner saw blades, which can be removed to allow use of thicker saw blades.

- [c12] 12. The compound miter guide of claim 1, wherein said blade guide is slidable at said pivotal connection and at a connection between said at least one side rail and said blade guide to allow said blade guide to slidably move along a line formed by said blade slot.
- [c13] 13. The compound miter guide of claim 12, wherein pivotal connection is a base plate pivot leg, a blade guide pivot leg and a slotted retainer on said blade guide; wherein said base plate pivot leg and said blade guide pivot leg each have a hole to allow pivotal connection between said base plate pivot leg and said blade guide pivot leg; wherein said blade guide pivot leg includes a leg and a back; and wherein said slotted retainer includes a channel to slidably receive said back of said blade guide pivot leg and a slot to slidably receive said leg of said blade guide pivot leg.
- [c14] 14. The compound miter guide of claim 1, wherein said top of said at least one side rail is attached above said blade slot at said top of said blade guide; further including at least one fastener; wherein said at least one side rail includes a protractor slot; wherein said at least one fastener is used to movably connect said top of said blade guide to said protractor slot of said at least one side rail; wherein said fastener includes a tightening end

to secure said blade guide along said protractor slot of said at least one side rail; further including a curved groove on said bottom of said base plate; further including a fence stud extending up from a top of said fence; and wherein said fence stud is positioned to engage said curved groove.

- [c15] 15. The compound miter guide of claim 1, wherein there are two side rails and said ends of said blade guide are between said two side rails; wherein said top of said side rails are attached above said blade guide at said top of said blade guide; further including at least one fastener; wherein said side rails include a protractor slot; wherein at least one of said two side rails includes a protractor inscribed; wherein said at least one fastener is used to movably connect said top of said blade guide between said protractor slots of said two side rails; wherein said fastener includes a tightening end to secure said blade guide along said protractor slots of said two side rails; further including a curved groove on said bottom of said base plate; further including a fence stud extending up from a top of said fence; and wherein said fence stud is positioned to engage said curved groove.
- [c16] 16. The compound miter guide of claim 1, wherein said top of said at least one side rail is attached above said blade slot at said top of said blade guide; further includ-

ing at least one fastener; wherein said at least one side rail includes a protractor slot; wherein said at least one fastener is used to movably connect said top of said blade guide to said protractor slot of said at least one side rail; wherein said fastener includes a tightening end to secure said blade guide along said protractor slot of said at least one side rail; and wherein said blade slot is enlarged at an upper portion to receive a miter saw with a thicker top.

[c17] 17. The compound miter guide of claim 1, wherein there are two side rails and said ends of said blade guide are between said two side rails; wherein said top of said side rails are attached above said blade guide at said top of said blade guide; further including at least one fastener; wherein said side rails include a protractor slot; wherein at least one of said two side rails includes a protractor inscribed; wherein said at least one fastener is used to movably connect said top of said blade guide between said protractor slots of said two side rails; wherein said fastener includes a tightening end to secure said blade guide along said protractor slots of said two side rails; and wherein said blade slot is enlarged at an upper portion to receive a miter saw with a thicker top.

[c18] 18. The compound miter guide of claim 1, wherein said top of said at least one side rail is attached above said

blade slot at said top of said blade guide; further including at least one fastener; wherein said at least one side rail includes a protractor slot; wherein said at least one fastener is used to movably connect said top of said blade guide to said protractor slot of said at least one side rail; wherein said fastener includes a tightening end to secure said blade guide along said protractor slot of said at least one side rail; and wherein said blade guide includes a removable center section having a thinner blade slot for guiding thinner saw blades, which can be removed to allow use of thicker saw blades.

[c19] 19. The compound miter guide of claim 1, wherein there are two side rails and said ends of said blade guide are between said two side rails; wherein said top of said side rails are attached above said blade guide at said top of said blade guide; further including at least one fastener; wherein said side rails include a protractor slot; wherein at least one of said two side rails includes a protractor inscribed; wherein said at least one fastener is used to movably connect said top of said blade guide between said protractor slots of said two side rails; wherein said fastener includes a tightening end to secure said blade guide along said protractor slots of said two side rails; and wherein said blade guide includes a removable center section having a thinner blade slot for guiding thin-

ner saw blades, which can be remove to allow use of thicker saw blades.

[c20] 20. The compound miter guide of claim 1, wherein said top of said at least one side rail is attached above said blade slot at said top of said blade guide; further including at least one fastener; wherein said at least one side rail includes a protractor slot; wherein said at least one fastener is used to movably connect said top of said blade guide to said protractor slot of said at least one side rail; wherein said fastener includes a tightening end to secure said blade guide along said protractor slot of said at least one side rail; and wherein said blade guide is slidable at said pivotal connection and at a connection between said at least one side rail and said blade guide to allow said blade guide to slidably move along a line formed by said blade slot.

[c21] 21. The compound miter guide of claim 1, wherein there are two side rails and said ends of said blade guide are between said two side rails; wherein said top of said side rails are attached above said blade guide at said top of said blade guide; further including at least one fastener; wherein said side rails include a protractor slot; wherein at least one of said two side rails includes a protractor inscribed; wherein said at least one fastener is used to movably connect said top of said blade guide between

said protractor slots of said two side rails; wherein said fastener includes a tightening end to secure said blade guide along said protractor slots of said two side rails; and wherein said blade guide is slidable at said pivotal connection and at a connection between said at two side rails and said blade guide to allow said blade guide to slidably move along a line formed by said blade slot.

- [c22] 22. The compound miter guide of claim 20, wherein pivotal connection is at least one base plate pivot leg, at least one blade guide pivot leg and at least one slotted retainer on said blade guide; wherein said base plate pivot leg and said blade guide pivot leg each have a hole to allow pivotal connection between said base plate pivot leg and said blade guide pivot leg; wherein said blade guide pivot leg includes a leg and a back; and wherein said slotted retainer includes a channel to slidably receive said back of said blade guide pivot leg and a slot to slidably receive said leg of said blade guide pivot leg.
- [c23] 23. The compound miter guide of claim 21, wherein pivotal connection is at lease one base plate pivot leg, at least one blade guide pivot leg and at least one slotted retainer on said blade guide; wherein said base plate pivot leg and said blade guide pivot leg each have a hole to allow pivotal connection between said base plate pivot leg and said blade guide pivot leg; wherein said blade

guide pivot leg includes a leg and a back; and wherein said slotted retainer includes a channel to slidably receive said back of said blade guide pivot leg and a slot to slidably receive said leg of said blade guide pivot leg.

- [c24] 24. The compound miter guide of claim 12, wherein said top of said blade guide includes a channel to receive a bolt as said fastener; where said channel is a slot to allow said blade guide to move along said bolt to allow movement along said line formed by said blade slot.
- [c25] 25. The compound miter guide of claim 13, wherein said top of said blade guide includes a channel to receive a bolt as said fastener; where said channel is a slot to allow said blade guide to move along said bolt to allow movement along said line formed by said blade slot.
- [c26] 26. The compound miter guide of claim 20, wherein said top of said blade guide includes a channel to receive a bolt as said fastener; where said channel is a slot to allow said blade guide to move along said bolt to allow movement along said line formed by said blade slot.
- [c27] 27. The compound miter guide of claim 21, wherein said top of said blade guide includes a channel to receive a bolt as said fastener; where said channel is a slot to allow said blade guide to move along said bolt to allow

movement along said line formed by said blade slot.

- [c28] 28. The compound miter guide of claim 22, wherein said top of said blade guide includes a channel to receive a bolt as said fastener; where said channel is a slot to allow said blade guide to move along said bolt to allow movement along said line formed by said blade slot.
- [c29] 29. The compound miter guide of claim 23, wherein said top of said blade guide includes a channel to receive a bolt as said fastener; where said channel is a slot to allow said blade guide to move along said bolt to allow movement along said line formed by said blade slot.
- [c30] 30. A compound miter guide comprising:
 - a base plate, said base plate including a top, bottom, cutting side, protractor inscribed on said top;
 - a fence attached to said bottom of said base plate at said midpoint;
 - a blade guide pivotally attached to said base plate at said cutting side of said base plate using a pivotal connection, said blade guide including a top, open bottom, two sides, two open ends, a blade slot between said sides, open bottom and said open ends; and
 - at least one side rail having a top and bottom and being attached between said base plate and said blade guide, said bottom of said at least one side rail attached to said

base plate, and said top of said at least one side rail attached to said blade guide such that said blade guide is movable along said at least one side rail.

- [c31] 31. The compound miter guide of claim 30, wherein at least one protractor is inscribed between said top and said bottom on one of said at least one side rail.
- [c32] 32. The compound miter guide of claim 30, wherein said blade slot is enlarged at an upper portion to receive a miter saw with a thicker top.
- [c33] 33. The compound miter guide of claim 30, wherein said blade guide includes a removable center section having a thinner blade slot for guiding thinner saw blades, which can be remove to allow use of thicker saw blades.
- [c34] 34. The compound miter guide of claim 30, wherein said blade guide is slidable at said pivotal connection and at a connection between said at least one side rail and said blade guide to allow said blade guide to slidably move along a line formed by said blade slot.
- [c35] 35. The compound miter guide of claim 34, wherein pivotal connection is a base plate pivot leg, a blade guide pivot leg and a slotted retainer on said blade guide; wherein said base plate pivot leg and said blade guide pivot leg each have a hole to allow pivotal connection

between said base plate pivot leg and said blade guide pivot leg; wherein said blade guide pivot leg includes a leg and a back; and wherein said slotted retainer includes a channel to slidably receive said back of said blade guide pivot leg and a slot to slidably receive said leg of said blade guide pivot leg.